REMARKS

Claims 1-20 are all the claims presently pending in the application.

Applicants gratefully acknowledge that **claims 6, 10, 13, and 14** would be **allowable** if rewritten in independent form.

While Applicants believe that all of the claims are in condition for allowance, to speed prosecution, Applicants have rewritten allowable claims 6 and 10 in independent form, thereby placing allowable claims 6, 10, 13, and 14 in condition for immediate allowance.

Applicants note that claims 4 and 5 have not been rejected on prior art grounds. Therefore, claims 4 and 5 presumably would be allowable if the rejection under 35 U.S.C. § 112, second paragraph, is overcome and if no new, more relevant prior art is uncovered by the Examiner's further search.

Claims 1-6, 10, 13, and 14 have been amended merely to make editorial amendments in conformance with U.S. Patent practice.

New claims 15-20 have been added to provide more varied protection for the present invention.

It is noted that the claim amendments are made only for placing the allowable claims in condition for allowance and for more particularly pointing out the invention, and not for distinguishing the invention over the prior art, narrowing the claims or for any statutory requirements of patentability. Further, Applicant specifically states that no amendment to any claim herein should be construed as a disclaimer of any interest in or right to an equivalent of any element or feature of the amended claim.

Claims 2-5 stand rejected upon informalities (e.g., 35 U.S.C. § 112, second paragraph).

Claims 1-3, 7-9, and 11 stand rejected under 35 U.S.C. §102(b) as being anticipated by Rannou et al. (U.S. Patent No. 3,942,180). Claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rannou.

These rejections are respectfully traversed in the following discussion.

I. STATEMENT OF THE SUBSTANCE OF THE TELEPHONE CONFERENCE

As a preliminary matter, Applicants' representative would like to thank the Examiner for courtesies extended in the telephone conference conducted on June 29, 2005, in which the Examiner kindly confirmed that claims 4 and 5, which were rejected only under 35 U.S.C. § 112, second paragraph (i.e., not rejected under prior art grounds), were not included as containing allowable at this time because the Examiner wishes to reconsider the allowability of these claim upon resolution of the rejection under 35 U.S.C. § 112.

As mentioned above, claims 4 and 5 have not been rejected on prior art grounds. Therefore, claims 4 and 5 presumably would be allowable if the rejection under 35 U.S.C. § 112, second paragraph, is overcome and if no new, more relevant prior art is uncovered by the Examiner's further search.

II. THE CLAIMED INVENTION

In an illustrative, non-limiting aspect of the invention, as defined for example by independent claim 1, an antenna device for use in a wireless communication apparatus, includes a base member including a dielectric material, a peripheral surface, and a plain surface, a first antenna element which is formed on the peripheral surface of the base member with the first antenna element having a three-dimensional configuration, and a second antenna element which is formed on at least one of the peripheral surface and the plain surface of the base member with a predetermined distance being kept from the first antenna

element. The second antenna element has a three-dimensional configuration when formed on the peripheral surface. The second antenna element has a two-dimensional configuration when formed on the plain surface.

In contrast to conventional antenna devices, the claimed invention provides a novel and unobvious antenna device which does not require additional members and/or separators between each of the antenna elements to assemble the antenna device. Thus, an antenna device according to the claimed invention can be provided with a plain structure, which is easily manufactured and assembled. Moreover, the antenna device according to the claimed invention can be easily mounted on a substrate (e.g., see specification at page 13, lines 21-29).

III. THE 35 U.S.C. § 112, SECOND PARAGRAPH REJECTION

Claims 2-5 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. These claims have been amended, above, to overcome this rejection.

Specifically, claims 2-5 have been amended to recite "*said three-dimensional configuration of at least one of said first antenna element and said second antenna element comprises ....*" Thus, Applicants submit that claims 2-5 are clear and definite and that the ordinarily skilled artisan would know and understand the metes and bounds of the claimed invention, as defined by claims 2-5.

In view of the foregoing, the Examiner is respectfully requested to reconsider and withdraw this rejection.

As mentioned above, claims 4 and 5 have not been rejected under prior art grounds, and therefore, should now be in condition for immediate allowance.

IV. THE PRIOR ART REJECTIONS

Claims 1-3, 7-9, and 11 stand rejected under 35 U.S.C. §102(b) as being anticipated by Rannou and claim 12 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Rannou.

The Examiner alleges that Rannou discloses all of the features of claims 1-3, 7-9 and 11, and suggests all of the features of claim 12. Applicants respectfully submit, however, that Rannou does not disclose or suggest all of the features of claims 1-3, 7-9, and 11. Therefore, Applicants respectfully traverse these rejections for at least the following reasons.

Rannou discloses a cylindrical protective casing 7, which is used as a mechanical support for the parts of the antenna as a whole (e.g., see Rannou at column 1, lines 61-64). That is, as illustrated in Figure 1 of Rannou, the cylindrical protective casing 7 supports the first array 5 and second array 6, which are respectively connected to the major bases of the first and second antennas 1 and 2.

Rannou also discloses that the first and second antennas 1 and 2 include two truncated cones which may be hollow and made of a conductive substance, or alternatively, may be made of a dielectric substance having a surface which has been metalized (e.g., see Rannou at column 1, lines 47-51).

However, Rannou does not disclose or suggest that the first and second antennas 1 and 2 are formed on a peripheral surface of the cylindrical protective casing 7, which the Examiner compares to the claimed "base member".

That is, Rannou does not disclose or suggest that the "*first antenna element... is formed on said peripheral surface of said base member*" or that the "*second antenna element ... is formed on at least one of said peripheral surface and said plain surface of said base member*", as recited in independent claim 1.

Instead, Rannou merely discloses that the cylindrical protective casing 7 is separately used as a mechanical support for the parts of the antenna as a whole (e.g., see Rannou at column 1, lines 61-64). That is, as illustrated in Figure 1 of Rannou, the cylindrical protective casing 7 supports the first array 5 and second array 6, which are respectively connected to the major bases of the first and second antennas 1 and 2.

On the other hand, the first and second antennas 1 and 2 of Rannou include two truncated cones which may be hollow and made of a conductive substance, or alternatively, may be made of a dielectric substance having a surface which has been metalized (e.g., see Rannou at column 1, lines 47-51). The cones are not comparable, however, to the claimed "*base member*", as recited in claim 1, and indeed, have not been compared to the claimed "*base member*" by the Examiner.

In contrast to conventional antenna devices, such as Rannou, the claimed invention provides a novel and unobvious antenna device which does not require additional members and/or separators between each of the antenna elements to assemble the antenna device. Thus, the exemplary antenna device according to the claimed invention can be provided with a plain structure, which is easily manufactured and assembled. Moreover, the antenna device according to the claimed invention can be easily mounted on a substrate (e.g., see specification at page 13, lines 21-29).

Thus, Applicants submit that Rannou clearly does not disclose or suggest that the "*first antenna element... is formed on said peripheral surface of said base member*" or that the "*second antenna element ... is formed on at least one of said peripheral surface and said plain surface of said base member*", as recited in independent claim 1.

For the foregoing reasons, Applicants submit that Rannou clearly does not disclose or suggest all of the features of the claimed invention. Therefore, the Examiner is requested to reconsider and withdraw this rejection.

V. NEW CLAIMS

New claims 15-20 have been added to provide more varied protection for the present invention.

Applicants submit that new claims 15-20 are patentable over the cited reference for somewhat similar reasons as those set forth above, as well as for the additional features recited therein.

VI. FORMAL MATTERS AND CONCLUSION

In view of the foregoing, Applicant submits that claims 1-20, all the claims presently pending in the application, are patentably distinct over the prior art of record and are in condition for allowance. The Examiner is respectfully requested to pass the above application to issue at the earliest possible time.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

The Commissioner is hereby authorized to charge any deficiency in fees or to credit any overpayment in fees to Attorney's Deposit Account No. 50-0481.

Respectfully Submitted,

Date: July 1, 2005

John J. Dresch, Esq.
Registration No. 46,672
Sean M. McGinn
Registration No. 34,386

McGinn & Gibb, PLLC
8321 Old Courthouse Road, Suite 200
Vienna, VA 22182-3817
(703) 761-4100
Customer No. 21254